

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P701247

Luminaire Tested: SQ4P-PW1-125U-050D-B50-1D-UNV-

Issue Date: 8/14/2023

Test Information

Test Method: LM-79-2019
Report Number: P701247
REPORT IS A COMBINATION OF REPORTS P700123 AND P700247
Test Lab: INNOVATION CENTER
Issue Date: 8/14/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4P-PW1-125U-050D-B50-1D-UNV-
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH, 1250 LUMENS PER FOOT UPLIGHT, 500 LU
FOOT DOWNLIGHT

Light Source: -
Ballast/Driver: -

Summary

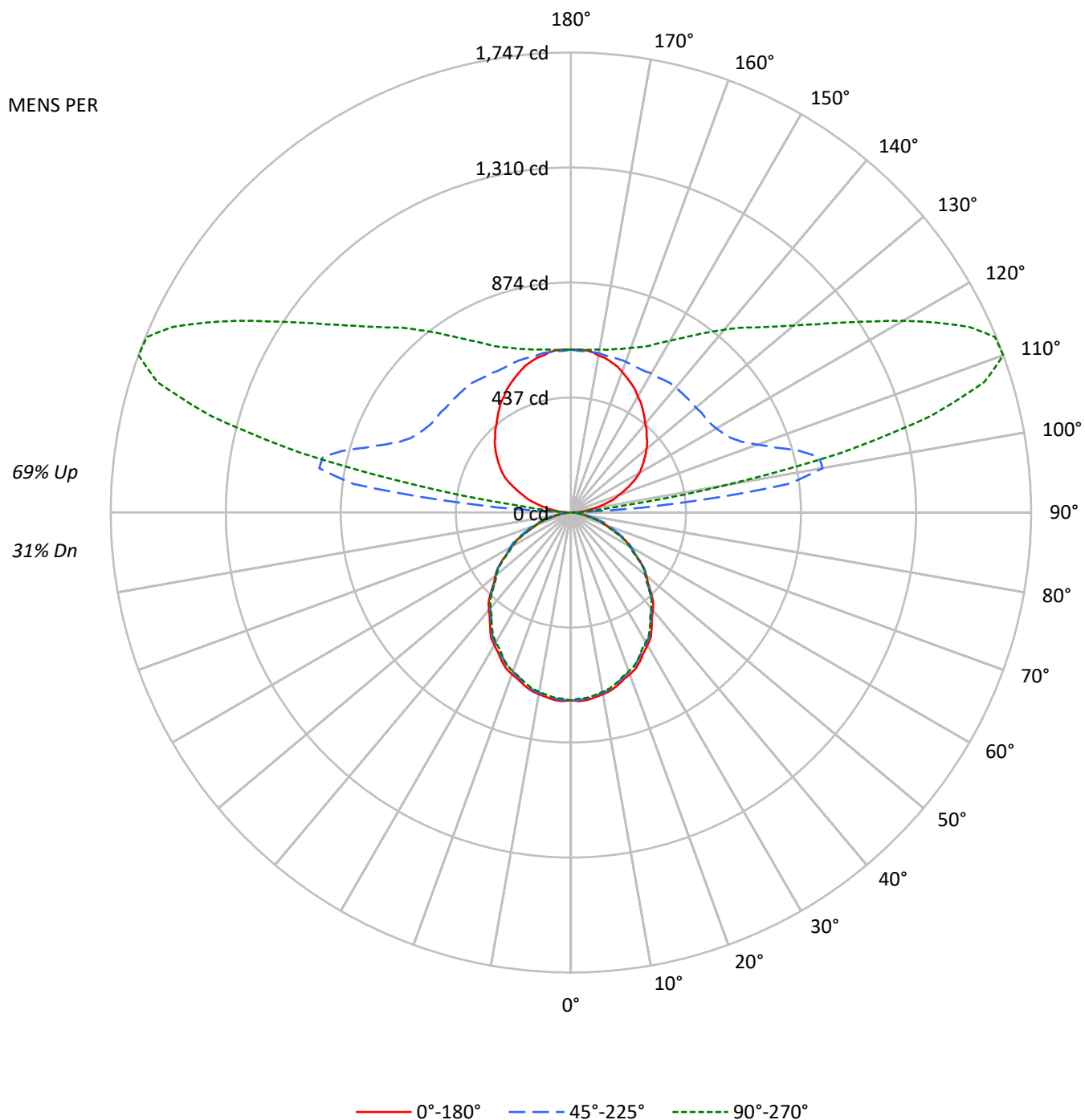
Lumens per Lamp: N/A
Luminaire Lumens: 5833.4 lumens
Efficiency: N/A
Efficacy: 114.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 50.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39
1	94	89	86	82	84	81	77	75	64	62	60	48	47	46	34	34	33
2	85	78	72	67	76	70	65	61	56	52	50	43	40	38	30	29	28
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6576	6576	6576
5°	6619	6567	6538
10°	6566	6514	6478
15°	6497	6424	6401
20°	6419	6320	6308
25°	6330	6214	6195
30°	6196	6102	6062
35°	6020	5935	5898
40°	5832	5741	5718
45°	5605	5531	5506
50°	5372	5328	5291
55°	5122	5122	5041
60°	4811	4903	4729
65°	4399	4619	4292
70°	3879	4254	3777
75°	3315	3804	3223
80°	2572	3204	2603
85°	1662	2456	2191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 5605 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.1	1.2
10°-20°	189.5	3.2
20°-30°	281.1	4.8
30°-40°	328.9	5.6
40°-50°	327.4	5.6
50°-60°	282.8	4.8
60°-70°	203.6	3.5
70°-80°	106.7	1.8
80°-90°	28.0	0.5
90°-100°	246.4	4.2
100°-110°	857.4	14.7
110°-120°	830.6	14.2
120°-130°	651.5	11.2
130°-140°	515.7	8.8
140°-150°	398.0	6.8
150°-160°	285.3	4.9
160°-170°	174.5	3.0
170°-180°	59.0	1.0
0°-30°	537.7	9.2
0°-40°	866.6	14.9
0°-60°	1476.9	25.3
0°-90°	1815.1	31.1
90°-120°	1934.4	33.2
90°-150°	3499.5	60.0
90°-180°	4018.0	68.9
0°-180°	5833.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	715	707	709	707	706	68
15°	680	672	673	671	670	192
25°	622	611	610	607	608	286
35°	534	527	527	522	524	334
45°	430	426	424	423	422	331
55°	318	318	318	314	313	284
65°	202	208	212	203	197	200
75°	93	102	107	100	90	100
85°	16	21	23	22	21	21
90°	9	14	14	9	5	6
95°	42	143	416	106	65	44
105°	143	203	901	1520	1414	151
115°	250	300	670	1414	1668	246
125°	337	416	624	1054	1257	302
135°	407	457	619	878	993	315
145°	476	508	614	758	822	298
155°	541	559	605	675	698	249
165°	592	596	610	638	642	167
175°	619	619	614	624	619	59
180°	619	619	619	619	619	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	712.8	712.8	712.8	712.8	712.8
2.5°	716.9	711.0	712.8	711.3	707.8
5°	714.7	706.7	709.1	707.2	705.9
7.5°	707.4	700.1	701.7	699.7	699.1
10°	700.9	693.6	695.3	692.8	691.5
12.5°	693.4	685.5	687.3	684.6	683.9
15°	680.2	671.6	672.6	671.3	670.1
17.5°	664.8	656.1	656.2	654.3	653.9
20°	653.8	644.6	643.7	641.2	642.5
22.5°	641.8	632.0	631.2	627.7	629.4
25°	621.8	611.3	610.4	606.7	608.5
27.5°	598.6	588.4	588.4	583.1	585.0
30°	581.6	571.7	572.8	566.6	569.0
32.5°	563.5	554.6	555.1	548.9	551.5
35°	534.5	527.1	526.9	521.9	523.7
37.5°	504.8	498.3	497.2	494.4	494.9
40°	484.2	478.7	476.7	474.8	474.8
42.5°	462.6	457.6	455.5	454.1	453.7
45°	429.6	425.9	423.9	422.6	422.0
47.5°	396.9	393.5	391.8	390.9	390.2
50°	374.3	371.9	371.2	369.3	368.6
52.5°	351.8	350.2	349.6	347.2	346.5
55°	318.4	317.9	318.4	314.1	313.4
57.5°	283.7	284.8	286.7	280.8	279.3
60°	260.7	263.0	265.7	258.8	256.3
62.5°	237.0	241.0	244.6	236.6	233.1
65°	201.5	207.7	211.6	203.4	196.6
67.5°	167.5	175.1	179.7	170.8	163.2
70°	143.8	152.4	157.7	148.6	140.0
72.5°	123.2	132.8	137.1	128.5	120.0
75°	93.0	101.6	106.7	99.6	90.4
77.5°	66.0	74.1	78.4	72.2	64.5
80°	48.4	56.9	60.3	55.1	49.0
82.5°	34.3	41.5	43.7	40.6	36.4
85°	15.7	20.6	23.2	22.0	20.7
87.5°	4.0	7.4	9.5	9.5	10.1
90°	9.2	13.9	13.9	9.2	4.7
92.5°	23.1	69.3	64.6	27.7	23.1
95°	41.6	143.3	415.8	106.2	64.6
97.5°	64.6	161.7	831.7	378.9	203.4
100°	87.8	171.0	970.3	910.2	586.8
102.5°	115.5	184.8	965.7	1279.9	1053.5
105°	143.3	203.4	901.0	1520.2	1413.9
107.5°	171.0	226.4	817.9	1626.4	1645.0
110°	194.0	249.5	753.1	1612.6	1746.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.8	272.7	702.3	1529.4	1742.0
115°	249.5	300.4	670.0	1413.9	1668.0
117.5°	277.2	332.7	651.5	1307.7	1561.8
120°	300.4	360.4	637.7	1206.0	1455.6
122.5°	318.8	388.1	628.4	1122.8	1349.2
125°	337.3	415.8	623.8	1053.5	1256.9
127.5°	355.8	434.3	623.8	1002.7	1173.7
130°	374.2	443.5	619.2	951.8	1104.3
132.5°	392.8	448.2	619.2	914.9	1044.3
135°	406.6	457.4	619.2	878.0	993.4
137.5°	425.1	466.7	619.2	845.6	951.8
140°	439.0	480.6	619.2	813.2	905.7
142.5°	457.4	494.4	619.2	780.9	864.1
145°	475.9	508.3	614.5	757.8	822.5
147.5°	494.4	522.1	610.0	734.7	785.5
150°	508.3	536.0	610.0	711.5	753.1
152.5°	526.8	549.9	605.3	688.5	725.4
155°	540.7	559.1	605.3	674.6	697.7
157.5°	554.5	572.9	605.3	660.8	679.3
160°	568.4	582.2	610.0	651.5	665.4
162.5°	582.2	591.5	610.0	642.2	651.5
165°	591.5	596.1	610.0	637.7	642.2
167.5°	600.7	605.3	610.0	633.0	633.0
170°	605.3	610.0	614.5	628.4	628.4
172.5°	614.5	614.5	614.5	623.8	623.8
175°	619.2	619.2	614.5	623.8	619.2
177.5°	619.2	619.2	614.5	623.8	619.2
180°	619.2	619.2	619.2	619.2	619.2

(END OF REPORT)